

REMARKS

Claim 27 is canceled without prejudice to its continued prosecution in a continuation and/or divisional application.

The amendments to claims 11-14, 20-21, and 25-26 were made for clarification and are fully supported by the description in the specification (e.g., page 19, line 14 to page 21, line 21; etc.). No new matter has been added.

Upon entry of this Response, claims 11-21 and 25-26 are present and active in the application.

Claim Rejections – 35 U.S.C. § 102

1. The rejection of claim 27 under 35 U.S.C. § 102(b) as being anticipated by *Fukuda et al.* (U.S. Patent No. 6,165,740) has been rendered moot by the cancellation without prejudice of this claim. Accordingly, withdrawal of this ground of rejection is respectfully requested.

2. The rejection of claims 11-15, 17, 19, and 25-26 under 35 U.S.C. § 102(b) as being anticipated by *Fukuda et al.* is respectfully traversed. As further explained below, *Fukuda et al.* fails to teach or suggest each and every element of independent claims 11 and 25.

Fukuda et al. describes a method and device for distinguishing between Bacilli, Staphylococci, Streptobacilli, Streptococci, and yeast fungi based on optical information obtained from scattered light (e.g., abstract; col. 3, lines 10-18, 21-27, and 42-50; col. 3, line 67 to col. 4, line 7; col. 6, lines 55-61; col. 7, lines 7-16; col. 13, lines 11-24; etc.). *Fukuda et al.* contains no teaching or suggestion of utilizing fluorescence information as a parameter for creating a scattergram, as required by independent claim 11. Similarly, *Fukuda et al.* contains no teaching or suggestion of analyzing fluorescence information to obtain a bacteria analysis result, as required by independent claim 25. On the contrary, *Fukuda et al.* teaches away from “fluorescently stained bacteria”—such as those recited in each of independent claims 11 and 25—and invokes instead the dual parameters of intensity and duration of emitted scattered light (e.g., col. 2, lines 11-20). Thus, the particle-size distribution graphs described in *Fukuda et al.* have horizontal and vertical

axes that correspond, respectively, to duration (Fscw) and intensity (Fsc) of emitted scattered light (e.g., col. 7, lines 10-12; col. 8, lines 4-6; FIGS. 9-20, FIG. 29, etc.). This contrasts with scattergrams having horizontal and vertical axes that correspond, respectively to fluorescent light intensity (FL) and forward scattered light intensity (Fsc), such as those shown, for example, in FIGS. 7-8 and 11-17 of Applicant's specification.

Notwithstanding the above distinctions—and in response to the argument set forth in the Office Action (page 6) that fluorescence information is inputted into signal-processing unit 10 so that fluorescence information could potentially be used as the basis for generating a scattergram (and, in turn, for determining whether bacteria in a sample are bacillus or coccus)—each of independent claims 11 and 25 has been clarified to recite that the control unit is configured for performing its recited operations on the basis of detected fluorescence information. The signal-processing unit 10 described in *Fukuda et al.* is clearly not so configured. By contrast to the claimed invention, *Fukuda et al.* is completely silent with respect to any type of computer program that would enable signal-processing unit 10 to execute operations using fluorescence information as a parameter (much less the specific operations recited in each of independent claims 11 and 25). Instead, even if the signal-processing unit 10 described in *Fukuda et al.* were to receive fluorescence information from photo diode 8 and/or photomultiplier tube 9 (col. 6, lines 49-61), signal-processing unit 10 would still lack the wherewithal that would enable it to use this information to determine whether bacteria in a sample are bacillus or coccus.

At a minimum, *Fukuda et al.* contains no teaching or suggestion of (a) "a control unit configured for performing operations comprising: creating a scattergram of the bacteria using...fluorescence information as parameters; analyzing distribution of the bacteria in the scattergram; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 11; or (b) "a control unit configured for performing operations comprising: analyzing...fluorescence information obtained from the bacteria; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 25.

Thus, inasmuch as *Fukuda et al.* fails to teach or suggest each and every element of independent claims 11 and 25, Applicant respectfully submits that the claimed invention

is neither anticipated by nor would have been obvious in view of this reference. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Claim Rejections – 35 U.S.C. § 103

1. The rejection of claim 27 under 35 U.S.C. § 103(a) as being unpatentable over *Fukuda et al.* in view of *Kubitschek et al.* (*Journal of Bacteriology*, 1986, 168, 1466-1467) and *Chupp et al.* (U.S. Patent No. 5,631,165) has been rendered moot by the cancellation without prejudice of this claim. Accordingly, withdrawal of this ground of rejection is respectfully requested.

2. The rejection of claims 11-21 and 25-26 under 35 U.S.C. § 103(a) as being unpatentable over *Fukuda et al.* in view of *Kubitschek et al.* and *Chupp et al.* is respectfully traversed. As explained above, *Fukuda et al.* fails to teach or suggest each and every element recited in independent claims 11 and 25. Moreover, the deficiencies of *Fukuda et al.* are not remedied by *Kubitschek et al.* or *Chupp et al.*, which likewise fail to teach or suggest all the elements of these independent claims.

At a minimum, none of *Fukuda et al.*, *Kubitschek et al.*, and *Chupp et al.* teaches or suggests (a) "a control unit configured for performing operations comprising: creating a scattergram of the bacteria using...fluorescence information as parameters; analyzing distribution of the bacteria in the scattergram; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 11; or (b) "a control unit configured for performing operations comprising: analyzing...fluorescence information obtained from the bacteria; and determining whether the bacteria in the sample are bacillus or coccus based on an analysis result," as required by independent claim 25.

Thus, inasmuch as *Fukuda et al.*, *Kubitschek et al.*, and *Chupp et al.* fail to teach or suggest each and every element of independent claims 11 and 25, Applicant respectfully submits that the claimed invention is neither anticipated by nor would have been obvious in view of these references, individually or in combination. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Conclusion

In view of the Amendment and Remarks set forth above, Applicant respectfully submits that the claimed invention is in condition for allowance. Early notification to such effect is earnestly solicited.

If for any reason the Examiner feels that the above Amendment and Remarks do not put the claims in condition to be allowed, and that a discussion would be helpful to advance prosecution, it is respectfully requested that the Examiner contact the agent of record, Gregory H. Zayia, directly at (312)-321-4257.

Respectfully submitted,



Tadashi Horie
Registration No. 40,437
Attorney for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200